



IFWG Task 1

Status on Forest Sector Inventory Improvement

January 6, 2010

ARB Scoping Plan

- Sets forth strategy for reducing State's greenhouse gas emissions to 1990 levels by 2020
- Acknowledges unique and critical role of forests
- Establishes “no-net-loss” goal for the forest sector
- Recognizes uncertainty in forest sector inventory estimates—improvement high priority

Board of Forestry and Fire Protection Strategic Plan

- Creates plan for BOF to meet or exceed the current forest sector sequestration target of 5 MMTCO₂e
- Outlines action items to prioritize efforts and ensure collaboration among agencies
- Creates Interagency Forestry Working Group (IFWG)
- Identifies importance of reducing uncertainties in forest sector carbon accounting

Interagency Forestry Working Group

- Addresses forest-related climate strategies and policies
- Includes representatives from CalFIRE, ARB, CEC, USFS, Cal/EPA, DFG, and DWR
- Provides BOF with technical information and policy recommendations to meet 5 MMTCO₂e target
- ARB identified as lead agency to improve forest sector inventory in collaboration with CalFIRE, USFS, and CEC

Improving the Forest Inventory

- ARB responsible for preparing statewide inventory—including the forest sector (H&SC §39607.4)
- Forest carbon accounting is complex—no perfect method
- Requires expertise from diverse scientific disciplines
 - Forestry
 - Earth and atmospheric sciences
 - Remote sensing
 - Soil science
- Members of IFWG recognized need for expert input on latest research and technical information for forest carbon accounting

Forest Inventory Symposium

- All day symposium held on October 19, 2009
- Forest inventory experts invited from universities, research institutions and government
 - UC Berkeley, Univ. of Montana
 - CalFIRE, USFS, National Park Service
 - NASA
 - Nature Conservancy
- Five panel discussions with 15 presentations on latest research, data, and methods related to forest inventories and carbon accounting

Key Symposium Outcomes

- Comprehensive forest inventory should include measurements of carbon stock and land-atmosphere carbon exchange (“flux”)
- Remote sensing, when properly ground-truthed, is an important tool for measuring carbon stocks
- Current and future datasets and data collection programs from CalFIRE and USFS are valuable
- Questions remain as to which methods and data are most appropriate for developing a statewide inventory
- Evaluation needed of near- and long-term forest sector inventory methods

Task 1 Next Steps

- Evaluate available data and methods
- Develop technical Scope of Work
- Workshop potential data sources and approaches
- Develop and fund contract
- Present draft forest sector inventory through ARB public process
- Periodically evaluate new methods with input from stakeholders including CalFIRE and USFS

Evaluation of Data and Methods

- Review of methods and data sources presented at the symposium
 - Remote sensing (statewide, regional, hybrid)
 - Ground-based data
 - Current mapping and monitoring programs
 - Forecasting of future emissions and stocks
- Considerations
 - Utility for statewide inventory
 - Method complexity
 - Data availability
 - Cost and staff resources

Technical Scope of Work

- Scope of Work includes
 - Contractor tasks and sub-tasks (e.g., carbon stocks/emissions by land cover type, etc.)
 - Potential data sources
 - Potential techniques and methods
- Scope of Work forms basis for ARB-funded contract
- Workshop potential techniques, methods and data as described in Scope of Work

Inventory Development Contract

- Forest sector inventory contract objectives
 - Generate update of statewide forest sector sequestration and emissions including projections
 - Provide ARB staff with the data sources, methods, and tools to update forest sector inventory in the future
- Process involves on-going input from CalFIRE, USFS, and CEC staff on inventory development progress

Updated Forest Sector Inventory

- Anticipated contract deliverables
 - Draft estimates of emissions and sequestration from the forest sector
 - Projections of forest stocks and emissions to 2020 at a minimum
 - Data, methods and tools to enable ARB staff to provide on-going inventory updates
- ARB staff will conduct a workshop to present the updated inventory at the completion of the contract

Timeline

<i>October 2009</i>	Forest inventory symposium
<i>January/February 2010</i>	Develop scope of work
<i>January/February 2010</i>	Workshop potential methods and data for inventory update
<i>February/March 2010</i>	Establish contract
<i>Late 2011</i>	Final contract results



Questions and Comments